LAVA HQ-ST Link

Business Case Analysis: HQ-ST Link versus Other IP-Based Polling

Introduction

This business case analysis compares the costs of operating an IP-based Electronic Cash Register (ECR) or IP-based Point-of-Sale (POS) polling system to the costs of equivalent polling using the LAVA HQ-ST Link system. While individual results may vary from deployment to deployment and company to company, the estimates and costs in this analysis are based on real-world experiences of actual companies.

Analysis

Comparative Cost Analysis: Installation Savings

(One-time, per Store Averages)

	IP-Based Polling	LAVA HQ-ST Link		
		Best-Case Scenario	Most Likely Scenario	Worst-Case Scenario
Support and labor costs related to installation of polling system[a]	$300.00	$15.00[b]	$30.00	$75.00
Total installation savings	—	$285.00	$270.00	$225.00

a. Based on man-hours needed to install polling of 4.0 hours/store. Installer labour costs are computed on a net salary of $75/hour to travel to a store, install hardware, map router ports, interface with ISPs, etc. These figures have been provided to LAVA by an actual quick service restaurant chain of 5000 stores for the installation contractor they employ, and are considered typical.

b. Best-case, most likely, and worst-case scenarios for labor savings are based on 95%, 90%, and 75% reductions respectively. It is assumed that some installation costs will still be required in occasional situations.

Comparative Cost Analysis: Total Operating Savings

(Annual, per Store Averages)

	IP-Based Polling	LAVA HQ-ST Link		
		Best-Case Scenario	Most Likely Scenario	Worst-Case Scenario
Support and labor costs related to polling[a]	$67.50	$3.38[b]	$6.75	$16.88
Total IP cost	$960.00[c]	$480.00[d]	$480.00	$480.00
Total polling costs	$1027.50	$483.38	$486.75	$496.88
Total operating savings	—	$544.12	$540.75	$530.62

a. Based on typical man-hours needed to support polling of 2.5 hours/year/store. Employee labour costs are computed on a base salary of $40k/year, along with supplemental expenses (benefits, taxes, etc.) of 17% and overhead costs (office space, supervision, etc.) of 20% over a 40-hour work week, 52 weeks/year. These figures have been provided to LAVA by an actual quick service restaurant chain of 300 stores, and are considered typical.

b. Best-case, most likely, and worst-case scenarios for labor savings are based on 95%, 90%, and 75% reductions respectively. Some support costs will still be required to handle polling failures caused by power failures, ISP outages, etc.

c. Based on $40.00 per month for Internet access, and $40.00 per month for static IP upgrade needed for non-HQ-ST connectivity, assuming one IP address per store. Static IP address rates vary from service provider to serice provider. Averages have been provided to LAVA by an actual quick service restaurant chain of 5000 stores, and are considered typical.

d. Figures assume that any store location polling over IP with the HQ-ST Link will not pay to support a static IP address.

Annual savings figures per store (we use the figures from the "most likely" scenarios for calculations in the table below), when extrapolated over a chain of stores and over time, give a picture of the very significant savings afforded by a deployment of HQ-ST Links:

Extended Savings: Multi-Year and Chain

	8-Store Chain	30-Store Chain	100-Store Chain	1000-Store Chain
First-Year Savings[a]	$6,486.00	$24,322.50	$81,075.00	$810,750.00
Two-Year Savings	$10,812.00	$40,545.00	$135,150.00	$1,351,500.00
Five-Year Savings	$23,790.00	$89,212.50	$297,375.00	$2,973,750.00

a. First-year savings include the one-time installation savings from the Comparative Cost Analysis: Installation Savings of this document.

The savings results of the Extended Savings analysis above can be combined with capital costs to yield return on investment figures for best-, most likely-, and worst-case scenarios:

Return on Investment (ROI)

	LAVA HQ-ST Link		
	Best-Case Scenario	**Most Likely Scenario**	**Worst-Case Scenario**
HQ-ST Link deployment cost/store (MSRP)	$489.95	$489.95	$489.95
Total operating savings/store (first year average)	$829.12	$810.75	$755.62
ROI (years)[a]	0.59	0.61	0.65

a. The ROI calculations above are computed for a first-year scenario only, as the payback period will in each case be in the region of half a year. In fact, some HQ-ST customers estimate that the savings on installation costs alone will pay for the hardware costs of deploying ST Plus units to stores.

Additional Considerations

This quick analysis shows that very large savings can be realized by an HQ-ST Link polling system. A number of additional variables could be added, but they are small factors given the enormous month-over-months savings of removing the need for a static IP address at stores. Nonetheless, they include: the basically offsetting head-office costs of the two options; the flexibility of an HQ-ST Link in handling bi-directional data (compared to FTP data collection); the high degree of security of HQ-ST Links (no "holes" (port mappings) are created in a store's router); and so on. This analysis does not compare evaluate the costs of polling using VPNs or store-side servers as they are more expensive hardware options with no discernable benefits over HQ-ST Links.

One important benefit provided by the HQ-ST Link that is not available to chains using other IP-based systems to poll ECRs is the increased visibility the HQ-ST Link provides, through the HQ Basic management software included with all HQ Plus units. This visibility gives franchise owners a greatly improved window on the operations of stores that can mean better monitoring of franchisee revenues, often the basis for royalty payments.

Conclusion

The LAVA HQ-ST Link is an extremely cost-effective alternative to polling using other IP-based systems, as its extremely short ROI figures of six to seven months show. In addition, the cumulative savings provided over time and over chains of stores are too substantial to be ignored.